Pcounter Popup, Pcounter Users & Client Codes User Manual

For Pcounter for Windows version 2.54 and above

About this Document

This document is intended to give a full explanation of all available features of the Pcounter utility Pcounter Popup and the HTTP based equivalent PcounterClient. To achieve this in its entirety the concepts of Client Codes and Pcounter Users are also fully explored. These three concepts are separated into their own sections for ease of reference.

Points to Note

All file locations referenced in this work refer to the drive on which Pcounter is installed on the Pcounter Data Server unless otherwise stated. It is assumed that all users have read access to the contents of the Pcounter share, default location C:\PCOUNTER.

Pcounter Popup and Pcounter Client have identical functionality, they are only different "under the hood". Consequently everything detailed in this document applies to both Popup and Client. Any references to Popup can be taken as referring to Popup and Client unless explicitly stated.

Any features which are only available in a later version of Pcounter than 2.54 will be highlighted with the earliest version number in the title for the feature.

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SECTION A: PCOUNTER POPUP/CLIENT

1. Introduction to Popup

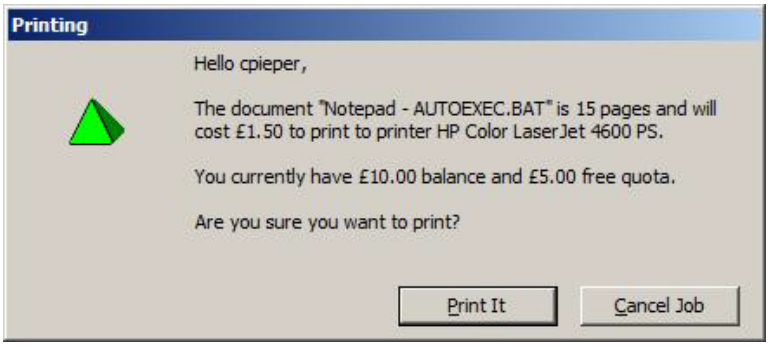
1.1 Popup

Pcounter Popup (PPOPUP.EXE) is a utility that is included with the core Pcounter application. It is an executable which runs in the background on a client machine and is visible in the system tray.

The basic functionality of Popup is to allow for user confirmation of a job *after* they have sent it to print. The job will remain paused in the queue until the user responds to Popup.

As well as print job confirmation, other more advanced features are:

- The ability to select **Client** (department) **Codes**
- It can force authentication before a job prints, restricting printing to users who only have a **Pcounter User Account**
- It can be used as a receiver for **broadcast messages** in Pcounter


Printing
Hello cpieper,
The document "Notepad - AUTOEXEC.BAT" is 15 pages and will cost £1.50 to print to printer HP Color LaserJet 4600 PS.
You currently have £10.00 balance and £5.00 free quota.
Are you sure you want to print?
Print It
Cancel Job

Popup communicates with the Pcounter Data Server via SMB and the Remote Procedure Call (RPC) service. Consequently Popup does not require the opening of any ports or exceptions to firewalls.

1.1.1 Requirements and Limitations of Popup

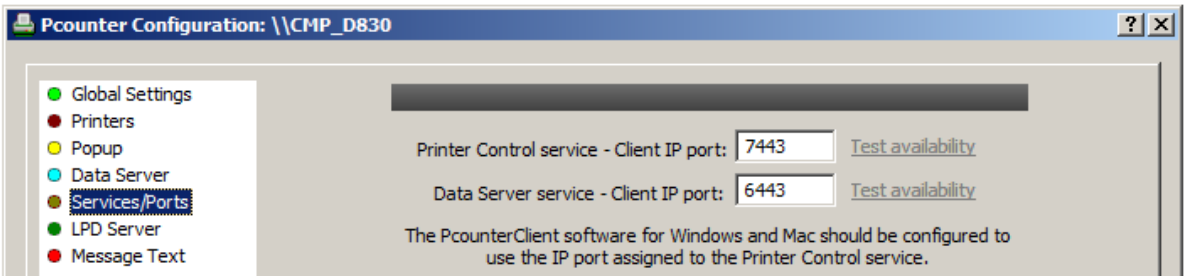
- Pcounter is running on a Windows Terminal or Citrix server
  - Each session must have a unique logon, or else popups will occur in multiple sessions
- Pcounter is running on Windows 2000 or later (standard workstation desktop)
  - No limitations.

1.2 PcounterClient (version 2.60)

As stated, **PcounterClient** (PcounterClient.exe) has identical functionality to Pcounter Popup. PcounterClient is available in Pcounter for Windows v 2.60 and above.

Client is **HTTPS based**, and therefore uses **TCP/IP ports** for communication with the server rather than SMB as does Popup. If using Client over Popup the relevant port will need to be opened up on all local firewalls for servers and workstations.

As a default Client uses the IP port assigned to **the Pcounter Printer Control service** which is **7443**. This can be changed through **Pcontrol** > **Server Configuration** > **Services and Ports**.



Please note: If changing the port for the Printer Control Service you will also need change the port used by Client itself. Use the **`/HTTPSPort=X`** command line switch. See **Section A5** and **Appendix A**.

1.3 Pcounter Popup and Pcounter Client Comparison

- Network communication
  - PPopup uses SMB and should not require any specific external routing or firewall configuration.
  - PcounterClient requires a configurable IP port for client/server communication.
- Notification messages
  - PPopup will not receive notification messages across subnets.
  - PcounterClient receives notification messages regardless of location.
- Non-domain computers
  - PcounterClient is recommended for use on non-domain computers.
- Terminal sessions
  - PPopup is recommended for use in terminal sessions. Each session must have a unique logon user name, or else popups will occur in multiple sessions.

2. Getting Started

2.1 Installing Popup on a client machine

PPopup.exe is installed on the server in the default location C:\Program Files\Pcounter for NT\NT\Client\

There are 2 recommended methods of loading Popup on a client machine:

- Add Popup.exe to the user's **Startup** folder
- Include the following command in the user's login script:
  - **`START DRIVE:PATH\PPOPUP [/options]`**

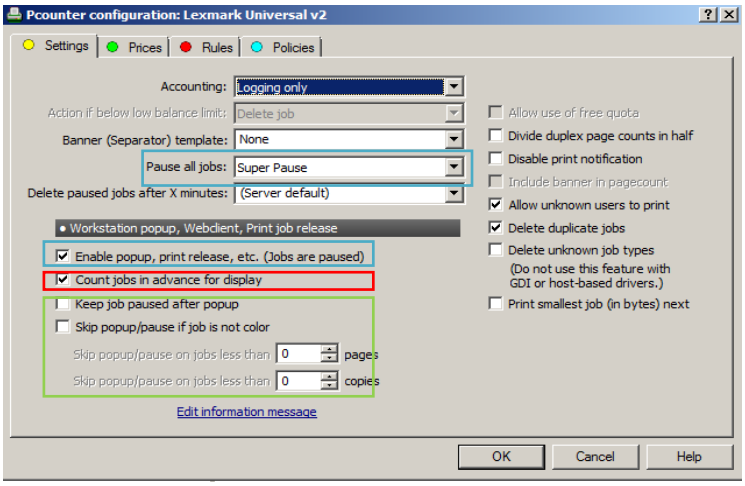
It is recommended to copy PPopup.exe to a shared network folder and push out from there via one of the two above methods.

Popup will appear in the user's system tray as a printer icon (this can be hidden using /hideicon, see **Section A-5.1** and **Appendix A**)

2.2 Configuring a Printer for Popup

Popup is printer based rather than user based. That means you decide which Printers you want Popup to be active for, rather than which Users. To activate Popup on a printer you will need to make sure that the following settings are active by opening the Pcounter configuration of the printer:

- **Pause all jobs** must be set to **Superpause**
- **Enable popup, print release etc...** must be **checked**
- **Count jobs in advance for display** is optional but recommended. This allows Pcounter to calculate values such as pagecount and cost for display through Popup



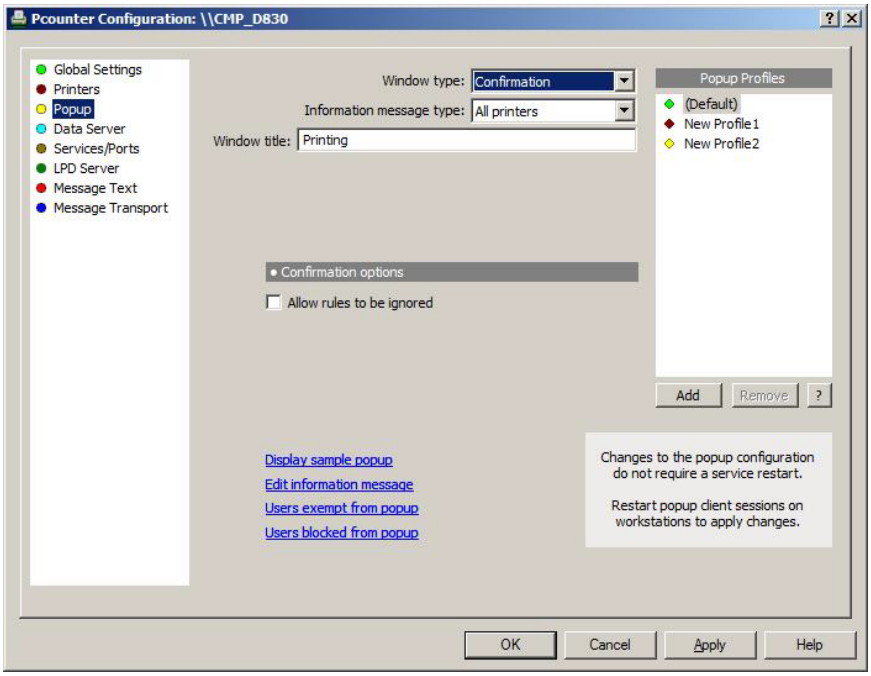
Other options which are available are:

- Keep job paused after Popup
  - This keeps the job paused so that it can be released to the printer in the future through some means of secure release such as Pcounter Station
- Skip Popup if job is not colour
- Skip Popup is job less than X pages/copies
- Edit information message
  - This allows for a custom message to be set for this specific printer. This must be used in conjunction with the setting **Information message type > Individual printers**

These options allow for greater customisation of exactly when Popup is used on this specific printer

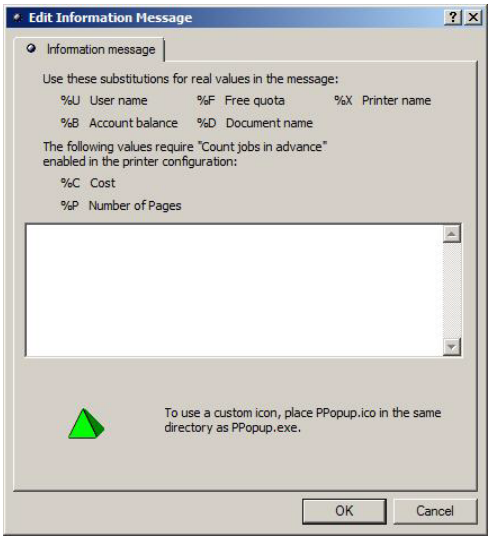
3. Server Configuration

Popup is configured through the Pcounter server configuration (accessed through **Pcontrol** > **Pcounter** menu > **Configure Pcounter Server** > **Popup**). All popup global settings are accessed through here such as **Profiles** and **Window Type**. The different Window Types are discussed later; first we will discuss the common controls across the different Window Types.



3.1 Edit Information Message

Popup carries a fully customisable message, which is edited through use of this hyperlink. This method allows the setting of the global message for all Popup printers. Individual printer messages can be set via the individual printer configuration (**see Section A-2.2**).


Edit Information Message
Information message
Use these substitutions for real values in the message:
%U User name
%F Free quota
%X Printer name
%B Account balance
%D Document name
The following values require "Count jobs in advance" enabled in the printer configuration:
%C Cost
%P Number of Pages
To use a custom icon, place PPopup.ico in the same directory as PPopup.exe.
OK
Cancel

Various substitutions representing real values from Pcounter and the print job in question are available for inclusion in the message. These are:

- %U Username
- %X Printer Name
- %D Document Name
- %B Account Balance
- %F Free Quota

If the option '**Count jobs in advance for display**' is active on the printer these are also available:

- %C Job cost
- %P Number of Pages

The length of the message is limited to **512 characters**.

3.2 Popup Profiles

Popup Profiles allow for different users or groups of users to use different Popup configurations. An example of this would be simple confirmation for students and client code selection for teachers/staff.

If no profile is specified for a user then the default profile is used. In order to set a different profile for the user the following switch needs to be used when Popup is loaded:

```
/profile=ProfileName
```

See **Section A-5** and **Appendix A** for more on command line switches.

To create a new profile simply press **Add**. Changes made to the configuration will apply to the profile selected in the list. Be sure to click Apply to save any changes.

To rename the profile click it whilst already selected.

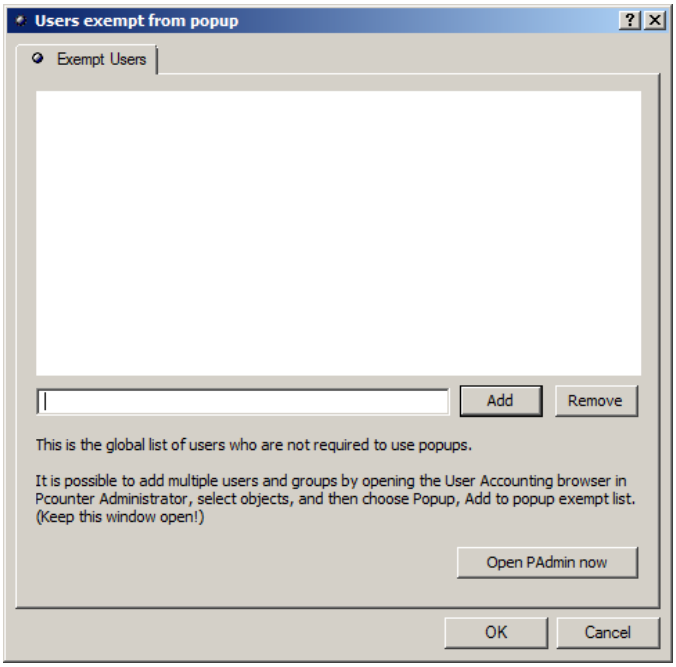
To delete a profile, click **Remove**.

3.3 Users Exempt/Blocked from Popup

These two options will deactivate Popup for these users, but with different effects:

- **Exempt**: If a user is exempt from Popup their jobs will not trigger Popup and they will not be paused, allowing their jobs to print through with no further user input.
- **Blocked**: This is used with the **ID and Password** window type only. It stops Popup appearing for this user altogether; however their jobs will still be paused. This essentially stops users from printing to popup controlled printers altogether.

Both of these links lead to the following window:


Users exempt from popup
Exempt Users
Add
Remove
This is the global list of users who are not required to use popups.
It is possible to add multiple users and groups by opening the User Accounting browser in Pcounter Administrator, select objects, and then choose Popup, Add to popup exempt list. (Keep this window open!)
Open PAdmin now
OK
Cancel

Users (usernames) can be typed into the text box and added/removed using the corresponding buttons.

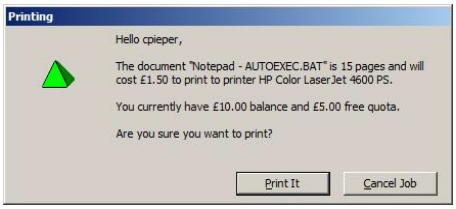
Multiple users or groups can also be added. To do this:

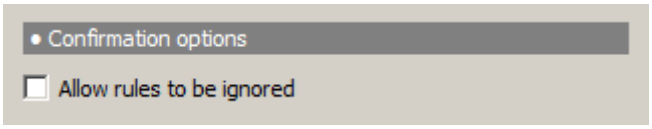
Open PAdmin via the button "**Open PAdmin now**". When PAdmin loads browse to the users or group and select them. Navigate to **Popup** > **Add to Popup exempt list**.

These users/groups will now be present in the list.

4. Window Types

4.1 Confirmation


Printing
Hello cpieper,
The document "Notepad - AUTOEXEC.BAT" is 15 pages and will cost £1.50 to print to printer HP Color LaserJet 4600 PS.
You currently have £10.00 balance and £5.00 free quota.
Are you sure you want to print?
Print It
Cancel Job



Confirmation is the most basic window type available to Popup. This allows only for the user to confirm that they do want to print the job. No further Input is available or necessary.

Options available

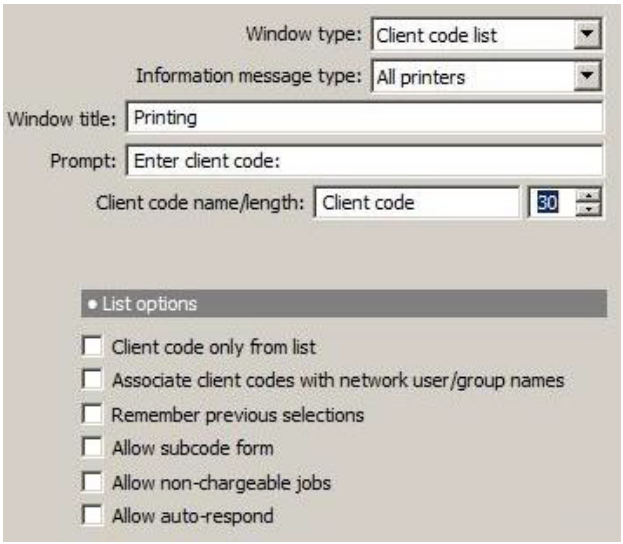
Allow rules to be ignored
This option will include **Yes** and **No** buttons on Popup, as well as the Cancel (Print button is removed). Clicking **Yes** causes the job to be processed as normal. **No** will ignore all rules when printing the job.

4.2 Client code list / Matter Number List

These two Windows Types are very similar and as such are described together in the following section. The differences are also highlighted.

See Section B Client Codes for detailed discussion on Client Codes and Subcodes

The client code list presents the user with either a list of pre-defined client codes and an optional entry form for free type of client codes.


Window type: Client code list
Information message type: All printers
Window title: Printing
Prompt: Enter client code:
Client code name/length: Client code 30
List options
Client code only from list
Associate client codes with network user/group names
Remember previous selections
Allow subcode form
Allow non-chargeable jobs
Allow auto-respond

Options available

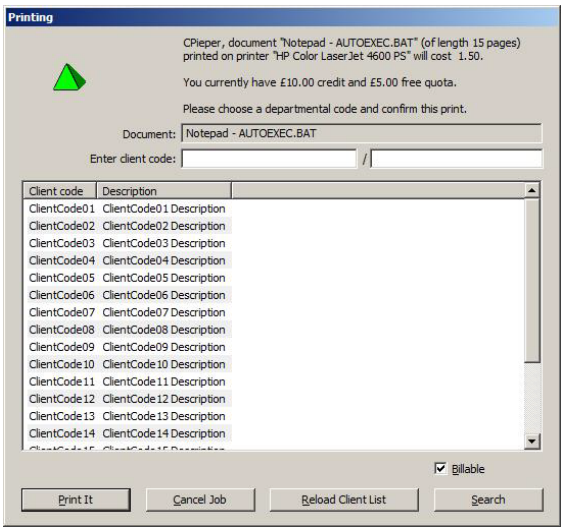
Client code only from list
This option determines whether the user has the option to free type a client code or whether they can only select one from the list

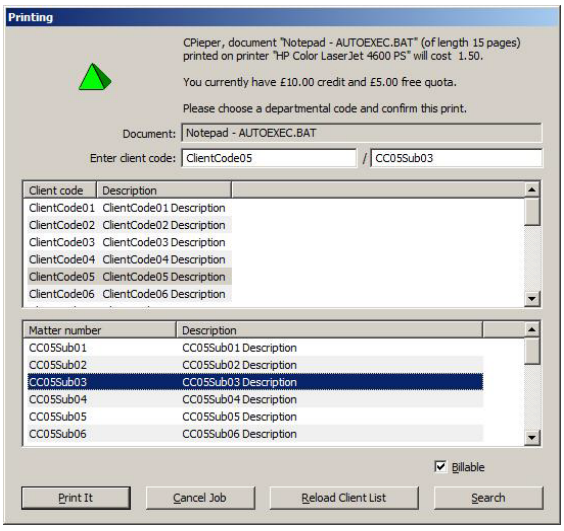
Associate client codes with network user/group names
Popup will only display codes where an association between the user and that code exists. It will also display codes which are associated to AD Groups that the user is a member of.

Remember previous selections
Popup will show a drop-down box containing a list of the **most recent codes** used by this user. They will be shown in order of most recent first with the most recent entered into the selection box as Popup loads. The codes listed will be both associated codes and free entry codes, if both of these options are activated. Previous selections are held in the file **PcounterClient.ini** in the user's local or roaming profile.
Allow subcode form (Client code list Window Type only)
An extra text box control will be visible for the **free type** of a **sub code** to accompany a Client Code. To restrict users to only pre-defined codes use **Matter Number List** Window Type and the **Subcode only from list** option.

Allow non-chargeable Jobs
A check box '**Billable**' will be visible on the Popup. This allows the users to decide whether the job is chargeable or not. If the job is processed with Billable checked the cost of the job will be recorded as 0 and subsequently the user will be **not be charged** for this job. The cost of the job will be recorded in the **Features** field of the Pcounter log file, in the format "**Non-Billable Cost=[cost]**".

Allow auto-respond
This feature allows users to have PPOPUP set client codes on print jobs automatically, based on the most recent input made in the PPOPUP window, for a specified period of time. If a user wishes to cancel auto-respond after it has been set, then it can be disabled in PPOPUP Preferences, see **Section A-6.**





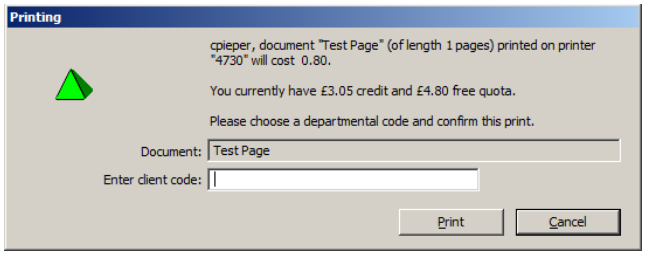
4.3 Entry Form

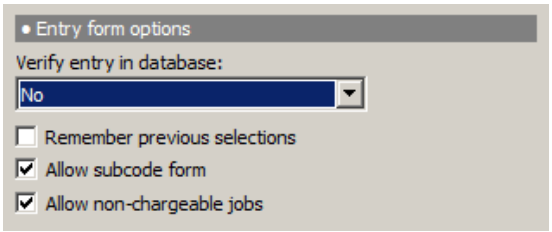
The entry form Window Type allows the user free type of client code and sub code (optional) and does not present the user with a list of pre-defined codes.

Options available

Verify entry in database:

- **No**: This allows the user complete free type of client code. There are no restrictions other than the user defined length. The code does not need to exist in the client code database
- **Normal**: Any code entered will be verified against the client code database
- **Display as password**: As Normal except any typed characters will be hidden with *s, in the same manner as a password entry form


Printing
cpieper, document "Test Page" (of length 1 pages) printed on printer "4730" will cost 0.80.
You currently have £3.05 credit and £4.80 free quota.
Please choose a departmental code and confirm this print.
Document: Test Page
Enter client code:
Print
Cancel



All other options available have been covered elsewhere.

4.4 ID and Password

The ID and Password window type forces the user to authenticate at Popup for every print job. The user may be an AD user or a Pcounter Popup User.

See Section C Pcounter Users for detailed discussion on Pcounter Users

If a username/password is not entered then the job is deleted. If 3 incorrect combinations are entered the job will also be deleted.

Situations where ID and Password popup may be useful are:

- Restricting printing to certain users
  - Only users with a valid username and password combination can print. This would need the Pcounter Users authentication type.
- Restricting printing with specific attributes to certain users
  - For instance only use popup when the job is colour, so only users with a valid username and password can print colour jobs. This may be useful in an educational environment where students need a teacher's authorization to print in colour.
- Allowing accounting on terminal sessions
  - In a situation where terminal sessions are used and consequently all users are logged on as the same user, this can be used to authenticate to a user's AD account and charge the correct user accordingly.

Options available

Password authentication:

- Pcounter Users Only:
  - Users must authenticate using a custom created Pcounter User (aka Popup User). These are created through Padmin, see Section 3. This option requires the Pcounter User Name and associated Pcounter User Password.
- Pcounter Users and Domain Password:
  - Users may logon using either Active Directory credentials or a Pcounter User.
- Job ID – No job password
  - Changes the owner name of the print job. Intended for use with shared logon accounts where some other additional method of job release and identification is required such as Pcounter Station or Pcounter Embedded.
- Job ID – password optional
  - As above, except password is optional. If used, this password must be used to release the job at secondary release device.
- Job ID – password required
  - As above, password mandatory.

Allow document name change
The user may change the file name of the job before printing.
Local login username only
This locks down the username box on Popup to only the currently logged in AD user. This is not available on Pcounter User Only password type.

Show confirmation after login
This option will show a second Popup after the Username/Password entry form. The second Popup displays the custom information message. If this is not used then any parameters used in the message will be obtained from the locally logged in user. This method allows the message to be customised to the user who has authenticated into Popup.

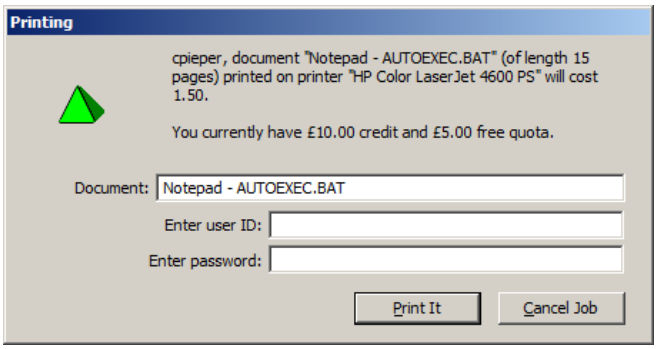
Allow client code form
The Popup will include the facility to enter a client code. This is free type and will not be verified against the client code database.

Job ID Options (available on all Job ID authentication types):

- Clear ID each time
  - The entry form will be blank every time it loads.
- Remember last ID
  - The entry form will be auto-populated with the previous entered ID.

- Use computer name as ID
  - The name of the workstation printed form will be auto-populated into the entry form but can be edited by the user.
- Use computer name as ID (Read-only)
  - See above, however cannot be edited by the user.

ID and password options
Password authentication:
Job ID - Job password required
Display username as password
Allow document name change
Job ID options:
Use computer name as ID


Printing
cpieper, document "Notepad - AUTOEXEC.BAT" (of length 15 pages) printed on printer "HP Color LaserJet 4600 PS" will cost 1.50.
You currently have £10.00 credit and £5.00 free quota.
Document: Notepad - AUTOEXEC.BAT
Enter user ID:
Enter password:
Print It
Cancel Job

5. PcounterClient.ini & Optional Settings in PPopup

5.1 PcounterClient.ini Preferences and command line options

Please note: The file PcounterClient.ini contains the necessary settings for both PPopup and PcounterClient. There is no PPopup.ini.

There are a wide variety of options which can be utilised with Popup which are activated in one of two ways:

- Including them in the ini file **PcounterClient.ini** under the [Preferences] heading and pushing file this out to the client machines along with Popup.
- Using them as **switches** when referencing the path back to Popup on the server.

For instance `START DRIVE:PATH\PPOPUP /hideicon` will activate the hideicon switch when loading Popup from the server.

Including the option hideicon=1 in PcounterClient.ini under [Preferences] will also invoke the option.

For a detailed list and explanation of each option see **Appendix A**.

5.1.1 PcounterClient.ini [Servers]

As a default, Popup will check every print server to which it is connected for waiting print jobs. In the event that Popup does not connect automatically to one of these servers, or

that one of the servers it has auto-connected to is not necessary, the list of servers can be manually defined.

In PcounterClient.ini, under the **[Servers]** heading:

- Enter ServerName=1 to ensure that Popup will check that server
- Enter ServerName=0 to ensure that Popup will ignore that server

5.2 Customising PPopup Icon

It is possible to change the graphic displayed on PPopup. To do this rename the necessary .ico file to PPOPUP.ico and copy to the location that PPOPUP.exe is loaded from.

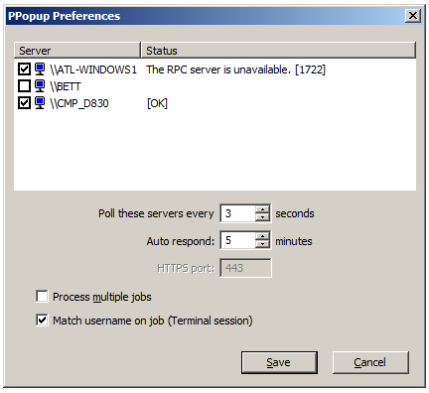
The file must be a genuine .ico file. Many websites exist that will convert a standard image format into an icon file free of charge.

5.3 Configuring Popup to run without PcounterClient.ini (version 2.71)

PPopup can be configured to run without the use of PcounterClient.ini which is useful when a single EXE file is needed for distribution, such as making PPopup available for download or when running from a user's Startup folder. To do this:

- Ensure that PcounterClient.ini exists in the same location as PPopup with the settings which you wish to hard-code into PPopup
- Browse to his location in a command line
- Run the command
  - `PPopup /IntegrateINI=Example`
- A new EXE will be produced in the same location, hard-coded with the settings from PcounterClient.ini. It will be named PPopup_Example

6. Local Options and Preferences



Popup contains a number of options which can be configured by the end user. These are accessed by right-clicking the system tray icon and selecting **Preferences**.

Please note: all of these options can also be configured through PcounterClient.ini

The **top list box** will display all print servers which the client is connected to, or the ones that are listed in PcounterClient.ini. If the server name is **checked** then Popup is polling that server for jobs. If it is **unchecked** then it is not. The **port** used by the Printer Control Service and PcounterClient will also be listed.

Status shows whether the connection to that server is successful. This will read **[OK]** if the connection is active, or will display an error if Popup is unable to connect to the server, such as **The RPC server is unavailable [1722]**. If the status is blank then the server is not being polled for jobs.

Poll these servers every X seconds determines how often Popup on the client will send an RPC command back to these servers checking for waiting print jobs for the user. The default is 3 seconds. This can be decreased if a faster response from Popup is required, or it can be increased if network bandwidth is an issue.

Auto-respond will be greyed out unless the Popup Window type is Client Code or Matter Number list and the **Allow auto respond** option is checked on the Popup Server Configuration (see **4.2 Client Code/Matter Number list Window Type**). This control allows the user to set how long Popup will wait before auto-responding with their previously selected code. The maximum setting is 1440 minutes (1 day).

Process multiple jobs is useful for situations where jobs are printed in bulk, such as a mail merge. Ordinarily each job in the merge would result in an instance of Popup which would need to be responded to. This option allows bulk jobs to be dealt with by one instance of Popup. If popup is set to Client Code/Matter Number list all jobs in the bulk print will be assigned the same code.

Match username on job will send the Popup response from the server to the Username that matches the owner of the job. This is as opposed to sending the response to the workstation from where the job originated. This is useful in terminal services environments where multiple users can be logged into the same workstation. It **should not** be used in an environment that allows shared user accounts with concurrent logon.

Also available through right-clicking the system tray icon

- **Exit Popup** (this can be disabled using /noexit – see **Appendix A**)
- **Restart Popup**. Useful for applying configuration changes without the need for the user to log off/on
- **About Popup**

Please note: To disable the end user's ability to edit any of these settings use the **/hideicon** switch or **hideicon=1** PcounterClient.ini option.

7. Messaging though Popup

Popup can be used as a receiver for broadcast messages in the event that the Windows Messenger service is disabled on the client machines.

To use Popup as a message receiver ensure that the option **Broadcast messages to workstation name** is enabled through **Pcontrol** > **Server Configuration** > **Message Transport**.

To use Popup in this way does not require it to also be used to confirm printing. If using solely for messaging use the command line option /msgonly (see **Section A-6** and **Appendix A**).

SECTION B: CLIENT CODES

1. Introduction to Client Codes

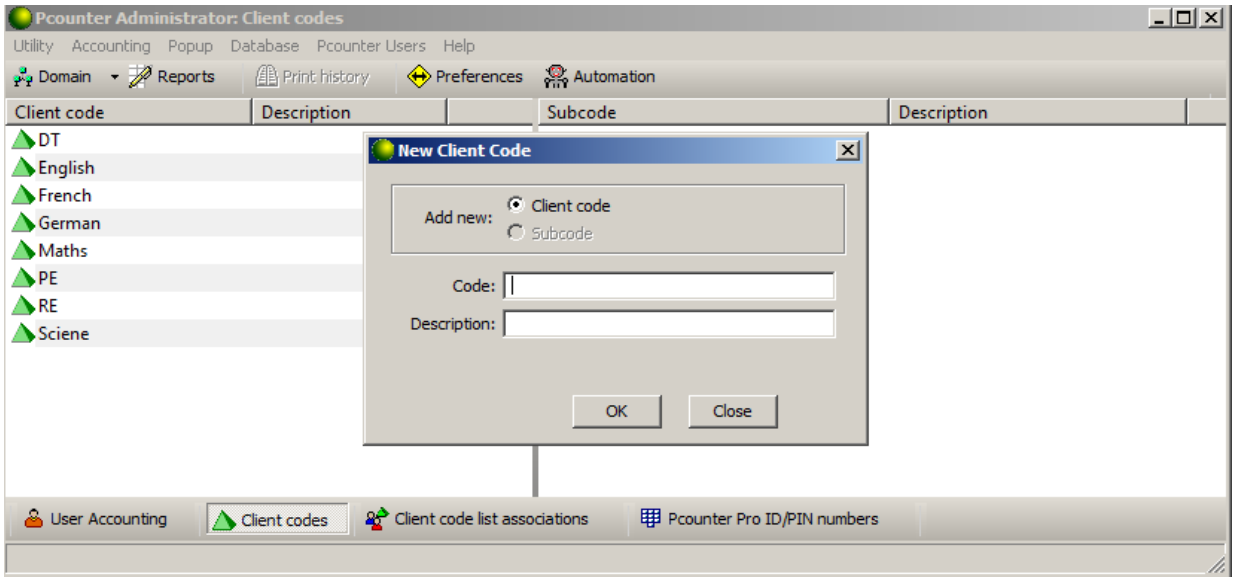
A Client Code is a plain text field which is recorded in the Pcounter log as part of a print record which can be used for reporting purposes to assist with client or departmental charge-back. Codes can be either manually selected (using PPopup or embedded software) from a list of codes or they can be automatically entered for the user every time they print ("Auto-codes").

The codes themselves are held in the database PPOPUP.DBF, the default location of which is C:\PCOUNTER\PPOPUP.DBF.

2. Client codes

2.1 Creating a client code

In Pcounter Administrator, select the Client Codes button from the bottom of the application.



All existing codes and descriptions will be displayed in the left-hand frame. To create a new code either:

- Go to **Popup** menu > **New Code**
- Right-click the white-space in the left-hand frame and select **New Code**

Type in the name of the new code and the description is necessary. Note that the description is optional. Click **OK** when done.

2.2 Editing an Existing Client Code

To change the name of an existing code right-click it and select **Rename**. To change the description select **Modify description** from the right-click menu. To delete an existing code right-click and select **Delete**.

2.3 Importing Client Codes from an Existing List

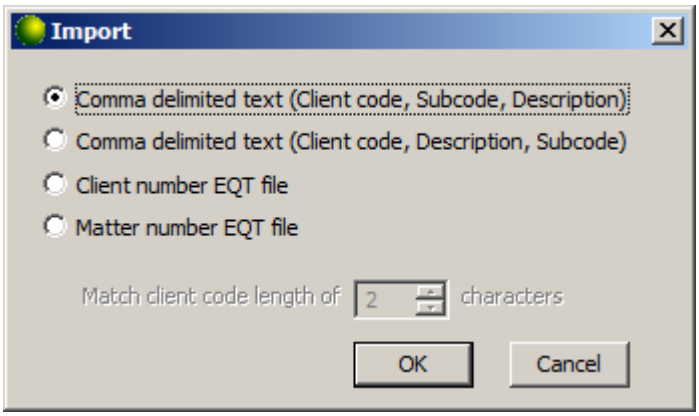
It is possible to import a list of Client Codes into Pcounter's database, which is useful if a large number of codes need to be setup in Pcounter which already exist in a database somewhere.

The file to import must be either a .csv or a .txt file. It must be in one of the following formats:

- Client Code
- Client Code, Description
- Client Code, Description, Sub-code
- Client Code, Sub-code, Description

Please note: See **Section B-3** for a description of Sub-code if necessary.

To import, select the **Database** menu > **Import**.



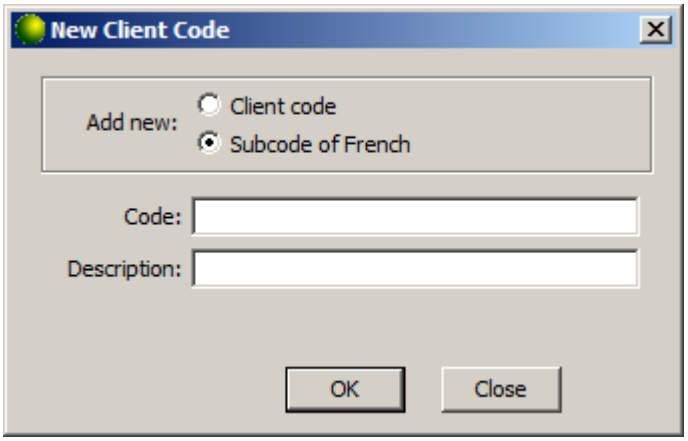
Select the format of your file. **Please note**: If your list contains only Client Codes, or Client Code, Description use the 2nd option. Click OK then browse to your file. Be sure that the file type drop-down is set to the correct file format. These codes will now appear in the left-hand pane

3 Sub-codes

Using sub-codes allows for two tiers of codes. A common example for this would be if multiple departments worked on the same project and you wanted users to record both their department and the project when they printed. In this instance the client code (1st tier code) would be the department and the sub-code would be the project code, for instance:

Department (Client Code)	Project (Sub-code)
Finance	Proj1
Finance	Proj2
Legal	Proj1
Legal	Proj2

3.1 Creating a Sub-code



To manually add a sub-code to an existing client code, in Pcounter Administrator right-click the client code and select **New Code**.

On the subsequent window ensure that **Subcode of [Code]** is selected then enter the sub-code and description into the corresponding text-boxes. Press **OK** or hit return to enter the code. The window will remain active for further code entry until it is closed via **Close.**

3.2 Editing an Existing Sub-code

Editing a sub-code is no different to editing a client code. For full details see Section 2.2 Editing an Existing Client Code.

3.3 Importing Sub-Codes from an Existing List

Sub-codes can only be imported as part of a Client Code import. To import sub-codes see **Section B-2.3**. **Please note**: to import sub-codes the associated client code must already exist in the database. It is suggested to import the client codes separately then perform a separate import for the sub-codes.

4. Client Code Associations

By default all users will have visibility of, and will therefore be able to use, all existing Client Codes.

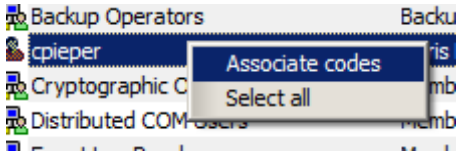
It is possible to associate codes to users then, in conjunction with the PPopup option "Associate Client Codes with network user/group names", the user will only be able to see and select codes to which they have an association (**See section A-4.2** for further details). The advantage of this option is that users are now unable to print to a department that they are not a member of.

Client Code Associations are visible in Pcounter Administrator through the **Client Code list associations** button at the bottom of the application. **Please note**: only the **active Organisational Unit** on the **User Accounting view** will be displayed.

The list of code associations is held in the file PASSOC.DBF, default location C:\PCOUNTER\PASSOC.DBF. This file can be opened in Excel if necessary.

Codes can be associated to either a **User** or an **AD Security Group**. All members of the group will receive the association. The association is dynamic, meaning that an association is not entered into the association database for each member of the group. A user's group membership is checked when Popup is loaded on the workstation, and all codes for their groups are loaded along with any direct associations. Consequently, if a user is removed from a group they will automatically lose all codes from that group *the next time Popup is reloaded.*

4.1 Manual Associations



To manually associate a code, select **Client code list associations** in PAdmin, right-click the user or group in question and select **Associate Codes**. In the subsequent window double-click each code you wish to associate to this object. The window will remain open until closed using the **Close** button. The codes you selected will now appear across from the user in the right-hand pane in Pcounter Administrator.

Please note: A user's association list is only refreshed when Popup is loaded therefore if they are logged on when they are granted access a new code they will not see it until next time they log off and back on or manually restart Popup through the right-click menu.

4.2 Deleting Associations

To remove an association, select the AD Object (User/Group), right-click the code in their associations list and select **Delete** from the popup menu.

Please note: As stated, a user's association list is only refreshed when Popup is loaded, therefore if they are logged in when the association is deleted they will still have access to it until the next time they log off or manually restart Popup through the right-click menu.

4.3 Import of Associations

There is no Import option for code associations however it is possible to construct a **.bat** file that will perform the same function. The steps involved in this are:

- Obtain a CSV in format **USERNAME,CODE_TO_BE_ASSOCIATED**. Remember users who need multiple codes will need multiple entries in the CSV, one per code.
- Open this in Excel. Insert two new columns at the start of the document. Fill the first column with the word **ACCOUNT**. Fill the 2nd column with the word **ASSOC**.
- Save the document, ensuring it remains a csv file.
- Open the document in a basic text editor such as Notepad**. Perform a Find and Replace on all commas, to replace with a space**. Save the document again.
- Change the file extension to a .bat, then copy into the same location as the Pcounter utility ACCOUNT.EXE, default location C:\Program Files\Pcounter for NT\NT
- Double-click the file to run it, which will perform the import.

An example of this file would be:

ACCOUNT	ASSOC	User1	Code1
ACCOUNT	ASSOC	User1	Code2
ACCOUNT	ASSOC	User1	Code3
ACCOUNT	ASSOC	User2	Code1
ACCOUNT	ASSOC	User2	Code2
ACCOUNT	ASSOC	User3	Code2
ACCOUNT	ASSOC	User3	Code3

5. Auto-Codes

An **Auto-code** is a Client Code which does not require manual selection; it is entered automatically by Pcounter for every job that a user prints. As it needs no manual input auto-code usage does not require usage of PPopup. If however a user who has an auto-code uses a manual method of code selection as well, the **manual method will take precedence**.

Whereas the two types of code (Auto and Client) may appear similar they are in fact conceptually quite different and are therefore held in separate databases. Auto-code associations are stored in the database **[DOMAIN]_AUTOCODES.DBF**, default location C:\PCOUNTER\DATA.

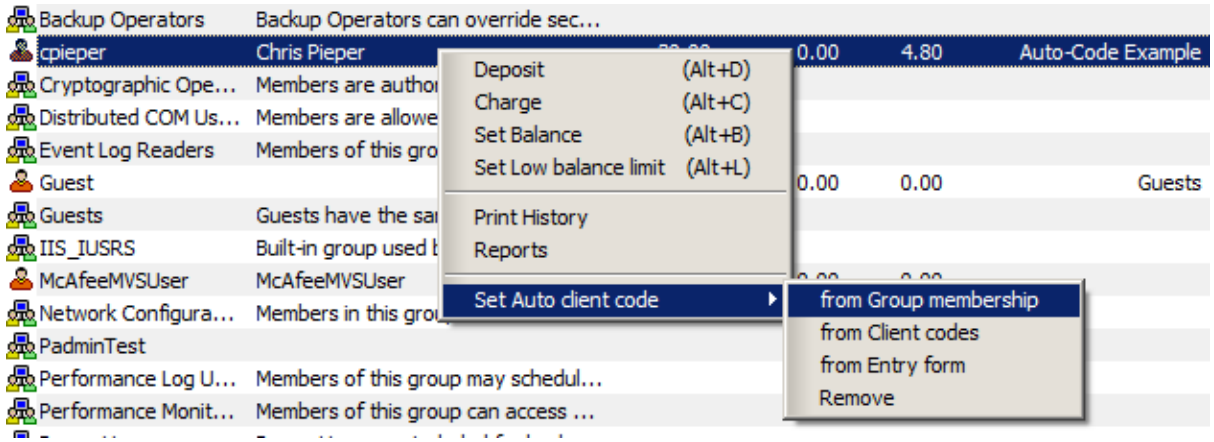
A User's current auto code is displayed as the right-most field in Pcounter Administrator's User Accounting view.

Please note: It is not currently possible to define a two-tier Auto-code (i.e. no auto-sub-codes).

5.1 Manual Association of an Auto-code

5.1.1 User

In Pcounter Administrator, on the User Accounting view, right-click a User and select **Set Auto client code**.



Selecting **from Group membership** will load a list of the AD groups of which this user is a member. Double-click the desired code, and this will be populated into the auto-code field. **Please note**: Once an auto-code has been set from Group membership there is no further AD lookup performed. Consequently if a user leaves a group their auto-code will remain as that group unless manually changed.

Selecting **from Client Codes** will load current list of all client codes from the client code databases. **Please note**: this **does not** load all pre-defined **Autocodes**. Double-click the desired code, and this will be populated into the auto-code field.

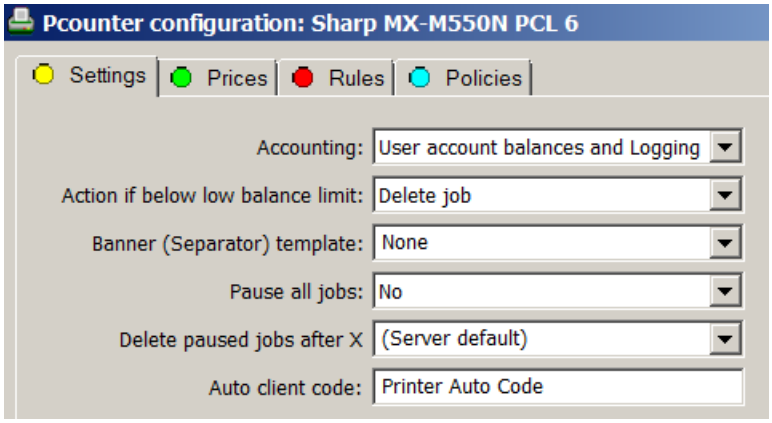
Selecting **from Entry Form** will allow you free type of the auto-code.

5.1.2 Group

To assign an auto-code to all members of a Group, in Pcounter Administrator User Accounting view, right-click a Group and select **Set Auto client code**. **The from Client Code** and **from Entry Form** options are as detailed above.

Selecting **to Group name for all members** will cause the name of this group to be set as the auto-code for all members of the group. If this action is performed on multiple groups and a user is in more than one of these groups, it is the last group which will be set as their code.

5.1.3 Printer (version 2.71)



Autocodes can be associated to printers so that any job printed to this printer is recorded as being printed to this code. The association is made through **Pcontrol** > **Printer Configuration** > **Settings** tab > **Auto client code**.

5.2 Removing a User's Auto-code association

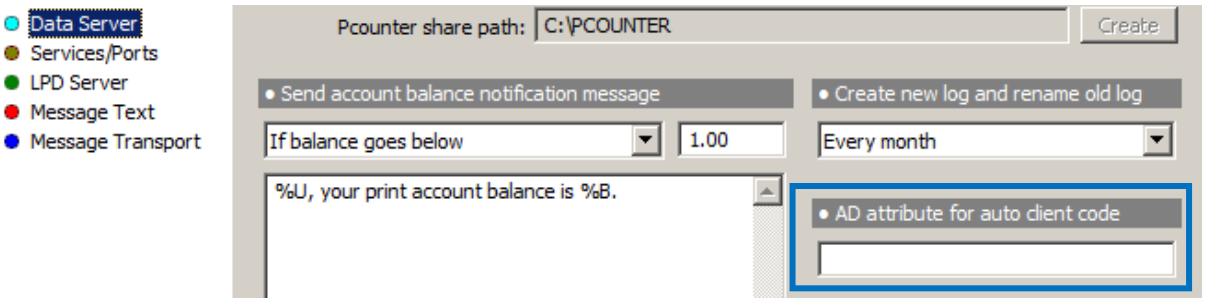
To remove an association simply select **Remove** in the right-click menu.

5.3 From AD Field

Pcounter can be configured to perform a look-up to AD each time a user prints and to take the contents of a pre-determined field to be the user's auto-code. This can be any field such as Department.

To do this:

- In **Pcontrol** open the Server Configuration (right-click server name > **Pcounter** > **Configuration**).
- Select the **Data Server** tab
- Enter the AD field into the text box **AD attribute for auto client code**



The lookup to this field is performed every time a user prints. Consequently changes to this field will replicate in real time.

Important: If using an AD attribute or a Group Name for an auto-code ensure that the code does not contain any none-standard characters, particularly / \ ,

6. Client Code Precedence Order

The order of precedence for the different client code selection methods is as follows:

1. Manual code through Pcounter Popup
2. Manual code through Pcounter embedded or release terminal
3. Printer based auto-code
4. Auto-code from AD
5. User based auto-code

SECTION C: PCOUNTER POPUP USERS

1. Introduction to Pcounter Popup Users

Pcounter Popup Users (or simply **Popup Users**) are user accounts which are created and managed through Pcounter that are used solely for the accounting of print jobs. Their primary function is to allow for individual user accounting when users do not have dedicated AD accounts, such as when accounts are shared or if the organisation uses a Workgroup rather than a domain.

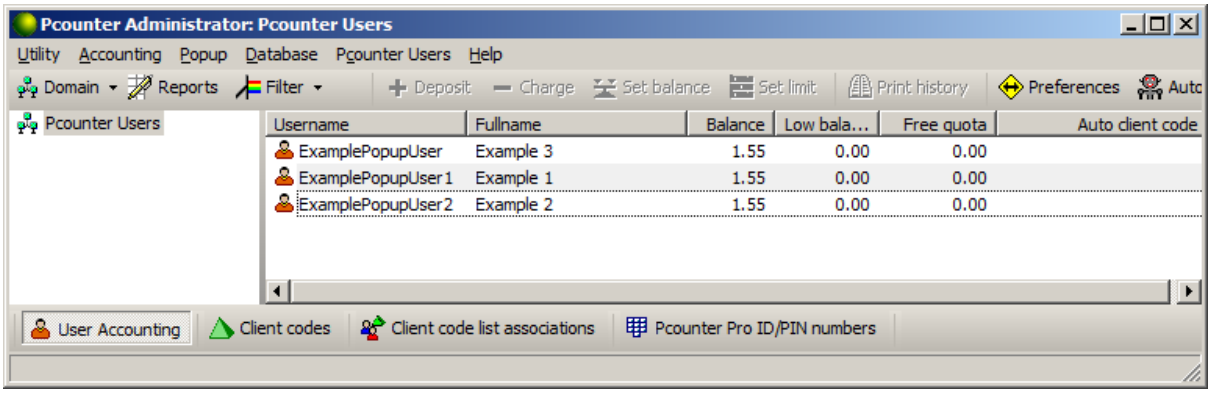
A common example is in a library which leaves public access workstations logged in all day, however still wishes to account for printing and still wishes to be able to charge users.

Popup users are nothing more than a Username and Password combination coupled with the standard Pcounter balance information.

As well as being used by Pcounter Popup, all **Pcounter Embedded software, Copier Control Terminals** and **Pcounter Station** are compatible with Popup Users.

They are stored in a the database PRINTERPOPUPUSERS.DBF, default location C:\PCOUNTER\DATA\PRINTERPOPUPUSERS.DBF

To view existing Popup Users, in PAdmin either go to **Domain** > **Pcounter Users** or **Pcounter Users** menu > **Show Users**.

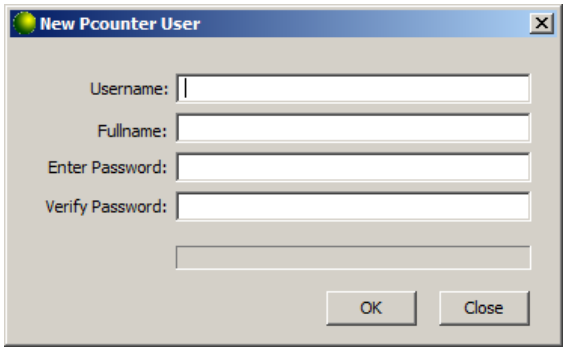

Pcounter Administrator: Pcounter Users
Utility Accounting Popup Database Pcounter Users Help
Domain Reports Filter Deposit Charge Set balance Set limit Print history Preferences Autc
Pcounter Users
Username Fullname Balance Low bala... Free quota Auto client code
ExamplePopupUser Example 3 1.55 0.00 0.00
ExamplePopupUser1 Example 1 1.55 0.00 0.00
ExamplePopupUser2 Example 2 1.55 0.00 0.00
User Accounting
Client codes
Client code list associations
Pcounter Pro ID/PIN numbers

Pcounter Users will now be displayed as the domain in the left-hand frame. All transactions and functions which can be performed on a standard AD user can be performed in exactly the same way on a Popup User.

Please note: If using Popup with Pcounter Users on none-domain clients it is strongly recommended that you use the /server= switch. See Appendix A for further details.

2. Creating a Popup User

2.1 Manually



To create a new Popup User, in PAdmin ensure that the view is currently set to Popup Users, as described above. Select **Pcounter Users** > **New User** to see this window.

Enter in all the details as requested and click **OK** to create the user.
Please note: **Username** and **Password**

fields are mandatory. The window will remain open until **Close** is selected to allow for quick entry of multiple users.

2.2 Importing Users

It is possible to **import** users into the Pcounter User database using a CSV file. The CSV must be in the format **USERNAME,FULLNAME,PASSWORD**. FULLNAME is optional. If FULLNAME is not desired the syntax of the CSV is **USERNAME,,PASSWORD** (note the double comma).

To perform the import:

- Ensure that you are in the Popup Users view in Pcounter Admin
- Select **Database** > **Import** from the menu bar
- Browse to the CSV

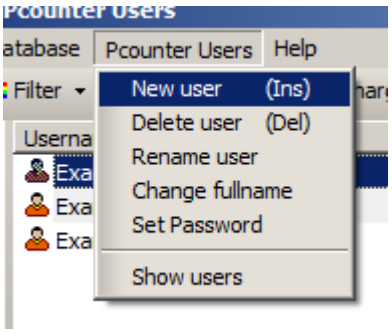
A message will appear confirming the number of users imported. If this number is not what you expected there is likely to be issues with the syntax of the CSV, or the CSV may contain none-standard characters which interfere with the import.

3. Restrictions for Popup Users

- All fields have a maximum length of 255 characters
- All fields are alphanumeric, none-standard characters or symbols **should not** be used.
- Passwords have a minimum length of 1 and no complexity requirements.
- Popup Usernames can be the same as existing AD Usernames if desired, Pcounter is able to distinguish between the two.
- If referencing a Popup User using account.exe precede the username with a *

4. Other Functions

When a user is selected in Pcounter Administrator, go to the **Pcounter Users** menu to view the functions which can be performed on an existing user.



- To delete a user select **Delete User** from the menu and confirm when prompted
- To rename the user select **Rename User**. **Please note**: you will not be able to rename an account so that the name is the same as an existing Popup User
- **Change Fullname** allows you to change the user's full name.
- **Set Password** allows you to change a user's password.

SECTION D: FAQ

Popup is running on my user's workstations however it does not appear when they print to a Popup enabled queue and their job does not print.

Try activating the option **Match Username on Job** through **Popup Preferences**. Depending on the configuration of your AD this may be necessary for Popup to work. Also ensure that the user is not listed under **Users blocked from Popup** see section **A-3.3**

Popup Preferences displays the message "The RPC Server is unavailable [1722]"

This means that Popup cannot contact the print server in question. This is invariably down to a communications issue on the network. Ensure that the server will ping from the workstation in question.

I am using Client Code list Window Type and Popup flashes up for an instant then disappears. My job then prints successfully.

If using client code associations and a user has only one code associated then this code will be automatically selected and Popup will not wait for a user response. To disable this option use the switch/ini setting **ShowPopupOnSingleCode** (see **Appendix A**)

I have made changes to the Popup configuration but they do not appear to have replicated to the users.

Any changes made to Popup require a restart of PPOPUP.exe on the workstations. This can be achieved using the **Restart** option in the system tray icon > right-click menu (see **A-6. Local Options and Preferences**), but it is recommended to simply make any changes out of hours so they apply the next working day.

Changes which require a restart include, but are not limited to:

- Any configuration changes made through Pcontrol
- Any changes to the list of available client codes
- Any changes to a user's client code associations

I have just activated Popup on a printer but it is not appearing when I print

The **Pcounter Printer Control Service** must be restarted whenever Popup is activated on a new printer. Restart this through **Pcontrol** > **Services and Ports** or **services.msc**.

I have tried to use the substitutions %C or %P in my message but they do not load the respected values for the user

Ensure that the option **Count jobs in advance for display** is active on the print queue. See section **A-2.2**

I have changed the information message for one printer but it still shows the global message defined in the server configuration

First ensure that you have **restarted the client** on the workstation since making the change. If the problem still occurs ensure that you have **Information message type** on the Server Configuration set to **Individual Printers**.
I have enabled Popup for messaging however my users are still not receiving messages. Why?

Pcounter uses Windows Messaging to send these messages, which as a default are blocked by many local firewalls including Windows Firewall. The necessary exceptions for the firewall are:

- NetBIOS session traffic over TCP port 139
- NetBIOS name management traffic over UDP port 137
- NetBIOS datagram traffic over UDP port 138

If these are not successful it may be necessary to add Windows File and Print Sharing to the exceptions list.

Appendix A: PcounterClient.ini options & command line switches

See **Section A-5** for usage of both option sets.

A1. Command Line Switches

- **/profile=profileName** PPOPUP uses the configuration profile specified by profileName. This option is not required to use the default configuration profile.
- **/hideicon** PPOPUP runs hidden, without an icon.
- **/noexit** PPOPUP runs with the Exit option disabled on its popup menu.
- **/preload=serverName** PPOPUP reads its configuration from serverName, and loads the client code database if necessary. Normally these operations are not performed until the first print job, and there may be somewhat of a delay (after the first print job) due to the time it takes to read the client database. This option can save time by preloading large databases so that the popup response is fast for the first print job.
- **/pmj** The local setting **Process multiple jobs** is enabled.
- **/matchuser** The local setting **Match Username on job** is enabled.
- **/poll=X** The local **Poll servers** setting is set to **X** seconds.
- **/server=serverName**
  - PPOPUP adds serverName to its list of servers. This is useful in rare cases where PPOPUP is unable to automatically detect a server.
- **/delay=X** PPOPUP will delay loading for **X** seconds. This is useful if the system is not initialized when PPOPUP runs.
- **/msgonly** PPOPUP is used only to receive broadcast messages, and will not pop up for print jobs.
- **/disablemsg** Disable broadcast message reception.
- **/idleCancel=X** PPOPUP will cancel the job after X seconds if no input is made. (Default is 300 seconds)
- **/center** The popup window will always be placed in the centre of the display.
- **/term** Terminate PPOPUP.
- **/HTTPSPort=X** designates the port number used by the Printer Control Service and PcounterClient

A2. PcounterClient.ini Options

- **PollTime=X** The server poll time will be set to X seconds. (Default 3 seconds)
- **Bounce=X** PPOPUP will restart itself every X minutes. (Default 0, disabled)
- **HTTPSPort=X** Port on which popup server listens (HTTP Protocol Client only, Default 443)
- **ProcessMultipleJobs=1** The local setting **Process multiple jobs** is enabled. (Default 0). See **Section A-6 Local Options & Preferences** for detailed explanation
- **MatchUserName=1** The local setting **Match Username on job** is enabled. (Default 0). See **Section A-6 Local Options & Preferences** for detailed explanation
- **HideIcon=1** PPOPUP runs hidden, without an icon. (Default 0)
- **NoExit=1** PPOPUP runs with the Exit option disabled on its popup menu. (Default 0)
- **Center=1** The popup window will always be placed in the center of the display. (Default 0)
- **Delay=X** PPOPUP will delay loading for X seconds. This is useful if the system is not initialized when PPOPUP runs. (Default 0)
- **ClearUserName=1** If the popup window type is ID and Password, then the user name field will be cleared before each prompt. (Default 0)
- **BroadcastOnly=1** PPopup should only receive broadcast messages, no popups for print jobs. (Default 0)
- **ShowPopupOnSingleCode=1** If client code associations are used and user has only one code assigned, popup window will be shown. (Default 0)

- **MaxAutoReply=X** The maximum value for users to auto respond to popups will be X minutes.
- **DisableMessaging=1** Disables reception of broadcast messages. (Default 0)
- **ConfigProfile=profileName** PPOPUP uses the configuration profile specified by profileName. This option is not required to use the default configuration profile.
- **IdleCancel=X** If PPOPUP receives no response in X seconds, it automatically cancels the job. (Default 300 seconds)
- **Preload=serverName** PPOPUP reads its configuration from serverName, and loads the client code database if necessary. Normally these operations are not performed until the first print job, and there may be somewhat of a delay (after the first print job) due to the time it takes to read the client database. This option can save time by preloading large databases so that the popup response is fast for the first print job.
- **InputLength=X** If the popup window type is ID and Password, then this specifies the minimum length required for input to each field. (Default 0, disabled)
- **CustomDLL=path** If a custom DLL is being used, enter the path here.
- **DocNameJobID=1** If the popup window type is ID and Password using a Job ID option, then for sites that want the document name obscured at the release station, this option will set the document name to the job ID number when the user answers the popup. (Default 0, disabled)
- **LockUserName=1** If the popup window type is ID and Password, and the Job ID option is set to Use Computer Name as ID, then the username field will be set to the computer name and always locked so that it can't be changed, and the keyboard focus set to the password field. So instead of using the Pcounter Station "Display computer names instead of user names", the user name field will show the computer name and print job passwords can be used. (Default 0, disabled)